Agents of Exposure in Transgender Patient Cases Managed by a Toxicologist: an Analysis of the Toxicology Investigator’s Consortium (ToxIC) Registry

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Background: The Toxicology Investigators Consortium (ToxIC) database was created in 2010 by the American College of Medical Toxicology (ACMT) to compile data recorded by medical toxicologists. In January 2017, the data field for transgender (and if transgender, male to female or female to male) was added to the ToxIC form. Little is known regarding trends in poisonings within the transgender community.

Research Question: To review medical encounters managed by a bedside toxicologist and provide descriptive data in trends among types of exposures within the transgender demographic.

Methods: In this study, a retrospective ToxIC database review of cases in which the patient identified as transgender was reviewed from January 2017–June 2019 and descriptive demographics were reported.

Results: There were 113 transgender cases included in the ToxIC Registry between January 2017 and June 2019. Among these, 41 (36.3%) were male-to-female, 68 (60.2%) were female-to-male, 3 (2.7%) were gender nonconforming, and 1 (0.9%) was unknown. Overall, 99 (87.6%) of the poisonings involved pharmaceutical drugs. Regarding agent of exposure, 24 (21.2%) were analgesics; 19 (16.8%) were antidepressants; 10 (8.8%) were antipsychotics, 12 (10.6%) were anti-cholinergic/anti-histamines, 7 (6.2%) were ethanol, 4 (3.5%) were anticonvulsants/mood stabilizers, and 4 (3.5%) were cough and cold medications. The most noted abnormal vital sign reported was tachycardia (n = 16, 14.2%). Sixty-one (54.0%) of the patients experienced some type of nervous system abnormality, the most common being coma (36, 31.9%). In this cohort, there were no reported deaths.

Conclusion: Among transgender patients with poisonings reported to the ToxIC Registry, the majority of participants used an analgesic or psychotropic (antidepressant, antipsychotic, anticonvulsant, or mood stabilizer) drug as their agent of exposure. Data describing sex and gender-specific differences in types of exposures/ingestions, as well as outcomes, may inform poisoning prevention practices as well as sex- and gender-based management of patients in this vulnerable population.